

of formal training within the first year of employment. They also must complete 120 hours of specialized training at the Federal Bureau of Prisons residential training center at Glynco, Georgia within the first 60 days after appointment. Experienced officers receive annual in-service training to keep abreast of new developments and procedures.

Some correctional officers are members of prison tactical response teams, which are trained to respond to disturbances, riots, hostage situations, forced cell moves, and other potentially dangerous confrontations. Team members receive training and practice with weapons, chemical agents, forced entry methods, crisis management, and other tactics.

With education, experience, and training, qualified officers may advance to correctional sergeant. Correctional sergeants supervise correctional officers and usually are responsible for maintaining security and directing the activities of other officers during an assigned shift or in an assigned area. Ambitious and qualified correctional officers can be promoted to supervisory or administrative positions all the way up to warden. Officers sometimes transfer to related areas, such as probation or parole officer.

Job Outlook

Job opportunities for correctional officers are expected to be very favorable through 2008. The need to replace correctional officers who transfer to other occupations or leave the labor force, coupled with rising employment demand, will generate thousands of job openings each year. In the past, some local and State corrections agencies have experienced difficulty in attracting and keeping qualified applicants, largely due to relatively low salaries and the concentration of jobs in rural locations. This situation is expected to continue.

Employment of correctional officers is expected to increase much faster than the average for all occupations through 2008, as additional officers are hired to supervise and control a growing inmate population. Increasing public concern about the spread of crime and illegal drugs—resulting in more arrests and convictions—and the adoption of mandatory sentencing guidelines calling for longer sentences and reduced parole for inmates will spur demand for correctional officers. Moreover, expansion and new construction of corrections facilities also are expected to create many new jobs for correctional officers, although State and local government budgetary constraints could affect the rate at which new facilities are built and staffed. Some employment opportunities will also arise in the private sector as public authorities contract with private companies to provide and staff corrections facilities.

Layoffs of correctional officers are rare because of increasing offender populations. While officers are allowed to join bargaining units, they are not allowed to strike.

Earnings

Median annual earnings of correctional officers were \$28,540 in 1998. The middle 50 percent earned between \$22,930 and \$37,550. The lowest 10 percent had earnings of less than \$18,810, while the top 10 percent earned over \$46,320. Median annual earnings in the industries employing the largest numbers of correctional officers in 1997 in the public sector were \$32,600 in the Federal Government, \$29,700 in local government, and \$27,300 in State government. In the management and public relations industry, where officers employed by privately operated prisons are classified, median annual earnings were \$18,500.

According to a 1999 survey in *Corrections Compendium*, a national journal for corrections professionals, there is no common pattern or trend in correctional salaries around the United States. The variance between the low and high starting salaries exists for all positions and personnel of all experience levels. Beginning salaries for State correctional officers ranged from \$14,600 in California to \$34,100 in New Jersey. The median salary for correctional officers with more than one year of experience ranged from \$18,000 in Mississippi to \$44,800 in New Jersey.

At the Federal level, the starting salary was about \$20,600 to \$23,000 a year in 1999. Correctional officers rated Senior Officer Specialist, who are required to be able to work any correctional post within an institution, started at about \$28,200 a year. Starting salaries were slightly higher in selected areas where prevailing local pay levels were higher. The annual average salary for correctional officers employed by the Federal Government was \$36,500 in early 1999.

In addition to typical benefits, correctional officers employed in the public sector usually are provided with uniforms or a clothing allowance to purchase their own uniforms. Civil service systems or merit boards cover officers employed by the Federal Government and most State governments. Their retirement coverage entitles them to retire at age 50 after 20 years of service or at any age with 25 years of service.

Related Occupations

A number of options are available to those interested in careers in protective services and security. House or store detectives patrol business establishments to protect against theft and vandalism and to enforce standards of good behavior. Security guards protect people and property against theft, vandalism, illegal entry, and fire. Police officers and deputy sheriffs maintain law and order, prevent crime, and arrest offenders. Probation and parole officers monitor and counsel offenders in the community and evaluate their progress in becoming productive members of society. Some of these related occupations are discussed elsewhere in the *Handbook*.

Sources of Additional Information

Information about correctional jobs in a jail setting is available from:

✦ The American Jail Association, 2053 Day Rd., Suite 100, Hagerstown, MD 21740. Internet: <http://www.corrections.com/aja/index.html>

For information about careers as a correctional officer in jails and prisons, contact:

✦ The International Association of Correctional Officers (IACO), P.O. Box 81826, Lincoln, NE 68501.

Internet: <http://www.acsp.uic.edu/iaco>

Information on entrance requirements, training, and career opportunities for correctional officers on the Federal level may be obtained by calling the Federal Bureau of Prisons at (800) 347-7744.

Internet: <http://www.bop.gov>

Information on obtaining a job with the Federal Government is available from the Office of Personnel Management through a telephone-based system. Consult your telephone directory under U.S. Government for a local number or call (912) 757-3000; TDD (912) 744-2299. The number is not toll free and charges may result.

Internet: <http://www.usajobs.opm.gov>

Fire Fighting Occupations

(O*NET 61002A, 61002B, 63002A, 63002B, 63005, 63008A, and 63008B)

Significant Points

- Fire fighting involves hazardous conditions and long, irregular hours.
- Keen competition for jobs is expected; many people are attracted to the occupation because it provides considerable job security and the opportunity to perform an essential public service.

Nature of the Work

Every year, fires and other emergencies take thousands of lives and destroy property worth billions of dollars. Firefighters help protect the public against these dangers by rapidly responding to a variety of

emergency situations. They are frequently the first emergency personnel at the scene of an accident or medical emergency and may be called upon to put out a fire, treat injuries, or perform other vital functions.

During duty hours, firefighters must be prepared to respond immediately to a fire or any other emergency that arises. Because fighting fires is dangerous and complex, it requires organization and teamwork. At every emergency scene, firefighters perform specific duties assigned by a superior officer. At fires, they connect hose lines to hydrants, operate a pump to high pressure hoses, and position ladders to deliver water to the fire. They also rescue victims and administer emergency medical aid as needed, ventilate smoke-filled areas, and attempt to salvage the contents of buildings. Their duties may change several times while the company is in action. Sometimes they remain at the site of a disaster for days at a time, rescuing trapped survivors and assisting with medical treatment.

Firefighters have assumed a range of responsibilities, including emergency medical services. In fact, most calls to which firefighters respond involve medical emergencies, and about half of all fire departments provide ambulance service for victims. Firefighters receive training in emergency medical procedures, and many fire departments require them to be certified as emergency medical technicians. (For more information, see the *Handbook* statement on emergency medical technicians and paramedics.)

Firefighters work in a variety of settings, including urban and suburban areas, airports, chemical plants, other industrial sites, and rural areas like grasslands and forests. In addition, some firefighters work in hazardous materials units that are trained for the control, prevention, and cleanup of oil spills and other hazardous materials incidents. Workers in urban and suburban areas, airports and industrial sites typically use conventional fire fighting equipment and tactics, while forest fires and major spills call for different methods.

In national forests and parks, rangers spot fires from watchtowers and report their findings to headquarters by telephone or radio. Forest rangers patrol to ensure travelers and campers comply with fire regulations. When fires break out, crews of firefighters are brought in to suppress the blaze using heavy equipment, handtools, and water hoses. One of the most effective means of battling the blaze is by creating fire lines through cutting down trees and digging out grass and other vegetation, creating bare land in the path of the fire that deprives it of fuel. Elite firefighters, called smoke jumpers, parachute from airplanes to reach inaccessible areas. This can be extremely hazardous because the crews have no way to escape if the wind shifts and causes the fire to burn toward them.

Between alarms, firefighters clean and maintain equipment, conduct practice drills and fire inspections, and participate in physical fitness activities. They also prepare written reports on fire incidents and review fire science literature to keep abreast of technological developments and changing administrative practices and policies.

Most fire departments have a fire prevention division, usually headed by a fire marshall and staffed by fire inspectors. Workers in this division conduct inspections of structures to prevent fires and ensure fire code compliance. These firefighters also work with developers and planners to check and approve plans for new buildings. Fire prevention personnel often speak on these subjects before public assemblies and civic organizations.

Some firefighters become fire investigators, who determine the origin and causes of fires. They collect evidence, interview witnesses, and prepare reports on fires in cases where the cause may be arson or criminal negligence. They are often called upon to testify in court.

Working Conditions

Firefighters spend much of their time at fire stations, which usually have features common to a residential facility like a dorm. When an alarm sounds, firefighters respond rapidly, regardless of the weather or hour. Fire fighting involves risk of death or injury from sudden cave-ins of floors, toppling walls, traffic accidents when responding to calls,



Fire fighting occupations offer the opportunity for public service and the satisfaction of helping others in need.

and exposure to flames and smoke. Firefighters may also come in contact with poisonous, flammable, or explosive gases and chemicals, as well as radioactive or other hazardous materials that may have immediate or long-term effects on their health. For these reasons, they must wear protective gear that can be very heavy and hot.

Work hours of firefighters are longer and vary more widely than hours of most other workers. Many work more than 50 hours a week, and sometimes they may work even longer. In some agencies, they are on duty for 24 hours, then off for 48 hours, and receive an extra day off at intervals. In others, they work a day shift of 10 hours for 3 or 4 days, a night shift of 14 hours for 3 or 4 nights, have 3 or 4 days off, and then repeat the cycle. In addition, firefighters often work extra hours at fires and other emergencies and are regularly assigned to work on holidays. Fire lieutenants and fire captains often work the same hours as the firefighters they supervise. Duty hours include time when firefighters study, train, and perform fire prevention duties.

Employment

Employment figures in this *Handbook* statement include only paid career firefighters—they do not cover volunteer firefighters, who perform the same duties and may comprise the majority of firefighters in a residential area. Paid career firefighters held about 314,000 jobs in 1998. More than 9 of every 10 worked in municipal or county fire departments. Some large cities have thousands of career firefighters, while many small towns have only a few. Most of the remainder worked in fire departments on Federal and State installations, including airports. Private fire fighting companies employ a small number of firefighters and usually operate on a subscription basis.

In response to the expanding role of firefighters, some municipalities have combined fire prevention, public fire education, safety, and emergency medical services into a single organization commonly referred to as a public safety organization. Some local and regional fire departments are being consolidated into county-wide establishments in order to reduce administrative staffs and cut costs, and to establish consistent training standards and work procedures.

Training, Other Qualifications, and Advancement

Applicants for municipal fire fighting jobs generally must pass a written exam; tests of strength, physical stamina, coordination, and agility; and a medical examination that includes drug screening. Workers may be monitored on a random basis for drug use after accepting employment. Examinations are generally open to persons who are at least 18 years of age and have a high school education or the equivalent. Those who receive the highest scores in all phases of testing have the best chances for appointment. The completion of community college courses in fire science may improve an applicant's chances

for appointment. In recent years, an increasing proportion of entrants to this occupation has had some postsecondary education.

As a rule, entry-level workers in large fire departments are trained for several weeks at the department's training center or academy. Through classroom instruction and practical training, the recruits study fire fighting techniques, fire prevention, hazardous materials control, local building codes, and emergency medical procedures, including first aid and cardiopulmonary resuscitation. They also learn how to use axes, chain saws, fire extinguishers, ladders, and other fire fighting and rescue equipment. After successfully completing this training, they are assigned to a fire company, where they undergo a period of probation.

A number of fire departments have accredited apprenticeship programs lasting up to 5 years. These programs combine formal, technical instruction with on-the-job training under the supervision of experienced firefighters. Technical instruction covers subjects such as fire fighting techniques and equipment, chemical hazards associated with various combustible building materials, emergency medical procedures, and fire prevention and safety. Fire departments frequently conduct training programs, and some firefighters attend training sessions sponsored by the National Fire Academy. These training sessions cover topics including executive development, anti-arson techniques, disaster preparedness, hazardous materials control, and public fire safety and education. Some States also have extensive firefighter training and certification programs. In addition, a number of colleges and universities offer courses leading to 2- or 4-year degrees in fire engineering or fire science. Many fire departments offer firefighters incentives such as tuition reimbursement or higher pay for completing advanced training.

Among the personal qualities firefighters need are mental alertness, self-discipline, courage, mechanical aptitude, endurance, strength, and a sense of public service. Initiative and good judgment are also extremely important because firefighters make quick decisions in emergencies. Because members of a crew live and work closely together under conditions of stress and danger for extended periods, they must be dependable and able to get along well with others. Leadership qualities are necessary for officers, who must establish and maintain discipline and efficiency, as well as direct the activities of firefighters in their companies.

Most experienced firefighters continue studying to improve their job performance and prepare for promotion examinations. To progress to higher-level positions, they acquire expertise in advanced fire fighting equipment and techniques, building construction, emergency medical technology, writing, public speaking, management and budgeting procedures, and public relations.

Opportunities for promotion depend upon written examination results, job performance, interviews, and seniority. Increasingly, fire departments use assessment centers, which simulate a variety of actual job performance tasks, to screen for the best candidates for promotion. The line of promotion is usually to engineer, lieutenant, captain, battalion chief, assistant chief, deputy chief, and finally to chief. Many fire departments now require a bachelor's degree, preferably in fire science, public administration, or a related field, for promotion to positions higher than battalion chief. There are requirements for a master's degree for executive fire officer certification from the National Fire Academy and for State chief officer certification.

Job Outlook

Prospective firefighters are expected to face keen competition for available job openings. Many people are attracted to fire fighting because it is challenging and provides the opportunity to perform an essential public service, a high school education is usually sufficient, and a pension is guaranteed upon retirement after 20 years. Consequently, the number of qualified applicants in most areas exceeds the number of job openings, even though the written examination and physical requirements eliminate many applicants. This situation is expected to persist in coming years.

Employment of firefighters is expected to increase more slowly than the average for all occupations through 2008 as fire departments continue to compete with other public safety providers for funding. Most

job growth will occur as volunteer fire fighting positions are converted to paid positions.

Turnover of firefighter jobs is unusually low, particularly for a hazardous occupation that requires a relatively limited investment in formal education. In addition to job growth, openings are expected to result from the need to replace those who retire, stop working for other reasons, or transfer to other occupations.

Layoffs of firefighters are uncommon. Fire protection is an essential service, and citizens are likely to exert considerable pressure on local officials to expand or at least preserve the level of fire protection. Even when budget cuts do occur, local fire departments usually cut expenses by postponing equipment purchases or not hiring new firefighters, rather than by laying off staff.

Earnings

Median annual earnings of firefighters were \$31,170 in 1998. The middle 50 percent earned between \$22,370 and \$40,840. The lowest 10 percent earned less than \$14,310, and the highest 10 percent earned more than \$50,930. Firefighters employed in local government, except education and hospitals, had median earnings of \$31,400 in 1997; those employed by State government, except education and hospitals, had median earnings of \$29,400; and firefighters in the Federal government had median earnings of \$26,900.

Median annual earnings of fire fighting and prevention supervisors were \$44,830 in 1998. The middle 50 percent earned between \$34,020 and \$59,610. The lowest 10 percent earned less than \$23,050, and the highest 10 percent earned more than \$81,570. Fire fighting and prevention supervisors employed in local government, except education and hospitals, earned about \$45,200 in 1997.

Median annual earnings of fire inspection occupations were \$40,040 in 1998. The middle 50 percent earned between \$30,500 and \$50,610. The lowest 10 percent earned less than \$22,150, and the highest 10 percent earned more than \$73,570.

The International City-County Management Association's annual Police and Fire Personnel, Salaries, and Expenditures Survey revealed that 89 percent of the municipalities surveyed provided fire protection services in 1997. The following 1997 salaries pertain to sworn full-time positions.

	<i>Minimum annual base salary</i>	<i>Maximum annual base salary</i>
Firefighters	\$26,900	\$35,200
Engineer	32,200	39,800
Fire Lieutenant	35,100	41,100
Fire Captain	37,500	44,700
Assistant Fire Chief	43,900	53,200
Battalion Chief	45,300	56,000
Deputy Chief	45,900	56,900
Fire Chief	52,700	66,000

Firefighters who average more than a certain number of hours a week are required to be paid overtime. The hours threshold is determined by the department during the firefighter's work period, which ranges from 7 to 28 days. Firefighters often earn overtime for working extra shifts to maintain minimum staffing levels or for special emergencies.

Firefighters receive benefits usually including medical and liability insurance, vacation and sick leave, and some paid holidays. Almost all fire departments provide protective clothing (helmets, boots, and coats) and breathing apparatus, and many also provide dress uniforms. Firefighters are generally covered by pension plans, often providing retirement at half pay after 25 years of service or if disabled in the line of duty.

Many career firefighters are represented by the International Association of Firefighters, while many chief officers belong to the International Association of Fire Chiefs.

Related Occupations

Fire-protection engineers identify fire hazards in homes and workplaces and design prevention programs and automatic fire detection

and extinguishing systems. Like firefighters, police officers and emergency medical technicians respond to emergencies and save lives.

Sources of Additional Information

Information about a career as a firefighter may be obtained from local fire departments and from:

☛ International Association of Firefighters, 1750 New York Ave. NW., Washington, DC 20006.

Internet: <http://www.iaff.org/iaff/index.html>

☛ U.S. Fire Administration, 16825 South Seton Ave., Emmitsburg, MD 21727.

Information about firefighter professional qualifications and a list of colleges and universities offering 2- or 4-year degree programs in fire science or fire prevention may be obtained from:

☛ National Fire Academy, Degrees at a Distance Program, 16825 South Seton Ave., Emmitsburg, MD 21727.

Internet: <http://www.usfa.fema.gov/nfa/index.htm>

Guards

(O*Net 63047)

Significant Points

- Favorable opportunities are expected for lower paying jobs, but stiff competition is likely for higher-paying positions at facilities requiring a high level of security, such as nuclear plants and government installations.
- Some positions, such as those of armored car guards, are hazardous.
- Because of limited formal training requirements and flexible hours, this occupation attracts many individuals seeking a second or part-time job.

Nature of the Work

Guards, who are also called security officers, patrol and inspect property to protect against fire, theft, vandalism, and illegal activity. These workers protect their employer's investment, enforce laws on the property, and deter criminal activity or other problems. They use radio and telephone communications to call for assistance from an ambulance, wrecker, or the police or fire departments as the situation dictates. Security guards write comprehensive reports outlining their observations and activities during their assigned shift. They may also interview witnesses or victims, prepare case reports, and testify in court.

Although all security guards perform many of the same duties, specific duties vary based on whether the guard works in a "static" security position or on a mobile patrol. Guards assigned to static security positions usually serve the client at one location for a specific length of time. These guards must become closely acquainted with the property and people associated with it, complete all tasks assigned them, and often monitor alarms and closed circuit TV cameras. In contrast, guards assigned to mobile patrol duty drive or walk from location to location and conduct security checks within an assigned geographical zone. They may detain or arrest criminal violators, answer service calls concerning criminal activity or problems, and issue traffic violation warnings.

Specific job responsibilities also vary with the size, type, and location of the employer. In department stores, guards protect people, records, merchandise, money, and equipment. They often work with undercover store detectives to prevent theft by customers or store employees and help in the apprehension of shoplifting suspects prior to arrival by police. In office buildings, banks, and hospitals, guards maintain order and protect the institutions' property, staff, and customers. At air, sea, and rail terminals and other transportation facilities, guards protect people, freight, property, and equipment. They



Guard positions are frequently filled through contracts with industrial security firms and commercial guard agencies.

may screen passengers and visitors for weapons and explosives using metal detectors and high-tech equipment, ensure nothing is stolen while being loaded or unloaded, and watch for fires and criminals.

Guards who work in public buildings such as museums or art galleries protect paintings and exhibits by inspecting people and packages entering and leaving the building. In factories, laboratories, government buildings, data processing centers, and military bases, security officers protect information, products, computer codes, and defense secrets. They check the credentials of people and vehicles entering and leaving the premises. Guards working at universities, parks, and sports stadiums perform crowd control, supervise parking and seating, and direct traffic. Security guards stationed at the entrance to bars and places of adult entertainment, such as nightclubs, prevent access by minors, collect cover charges at the door, maintain order among customers, and protect property and patrons.

Armored car guards protect money and valuables during transit. In addition, they protect individuals responsible for making commercial bank deposits from theft or bodily injury. When the armored car arrives at the door of a business, an armed guard enters, signs for the money, and returns to the truck with the valuables in hand. The return to the truck with the money and taking the deposits into the bank can be extremely hazardous for the guard, and a number of them have been robbed and shot in recent years, so armored car guards usually wear bullet-proof vests.

All security officers must show good judgment and common sense, follow directions and directives from supervisors, accurately testify in court, and follow company policy and guidelines. Guards should have